AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A sterilization chamber for sterilizing objects, comprising a vacuum conduit connected to a vacuum pump, also comprising a conduit for a ~~vapour~~ vapor composite consisting of water ~~vapour~~ vapo r and hydrogen peroxide ~~vapour~~ vapor, and comprising a conduit for flood gas for application in a process in which the ~~vapour~~ vapor composite, fed without carrier gas flow into the sterilization chamber in which a vacuum prevails, settles on the surfaces of the objects to be sterilized and on the surfaces of the sterilization chamber in the form of a condensation layer, which is suctioned off after a pre-determined reaction time by means of further evacuation of the sterilization chamber, wherein the surfaces ~~(13)~~ of the sterilization chamber ~~(4)~~ are made of poor heat-conducting, water-repellent material.

2. (previously presented) A sterilization chamber according to claim 1, wherein its surfaces ~~(13)~~ have a coating ~~(16)~~ of plastic, glass or closed-pore ceramic material.

3. (new) A sterilization chamber for sterilizing an object with a vapor composite comprising water vapor and hydrogen peroxide vapor said sterilization chamber comprising:

component parts which come into contact with a condensation layer, said component parts being configured from a material selected from the group consisting of plastic, glass or a closed-pore ceramic material.

4. (new) The sterilization chamber of claim 3 further comprising a plastic material which forms a coating covering a surface of the sterilization chamber.

5. (new) The sterilization chamber of claim 3, wherein said component parts are configured from a plastic on a PTFE base.

6. (new) The sterilization chamber of claim 3, wherein said component parts are configured from silicon rubber.

7. (new) The sterilization chamber of claim 3, wherein said sterilization chamber is provided with first valve means and first conduit means for allowing entry and exit of a vapor composite and second valve means and second conduit means for applying a vacuum.

8. (new) The sterilization chamber of claim 7, wherein said first conduit means is attached to an evaporator.

9. (new) The sterilization chamber of claim 7, wherein said second conduit means is attached to a vacuum pump.

10. (new) The sterilization chamber of claim 3, wherein said sterilization chamber is provided with a flood gas valve and flood gas conduit which may be used to ventilate the sterilization chamber.

11. (new) A method of sterilizing an object, said method comprising the step of:

exposing an object to a vapor composite within a sterilizing chamber, said sterilizing chamber having component parts which come into contact with a condensation layer, said component parts being configured from a material

selected from the group consisting of plastic, glass or a closed-pore ceramic material.

12. (new) The method of claim 11, further comprising the steps of:

evacuating the sterilization chamber using a vacuum pump;

providing a vapor composite within the sterilization chamber to form a condensation layer;

removing the condensation layer; and

ventilating the sterilization chamber.

13. (new) The method of claim 12, wherein said step of evacuating the sterilization chamber further comprises the step of isolating the sterilization chamber from the vacuum pump with a valve.

14. (new) The method of claim 11, wherein said vapor composite comprises water and hydrogen peroxide.

15. (new) The method of claim 12, wherein said step of removing the condensation layer further comprises evacuating the sterilization chamber.

16. (new) The method of claim 15, wherein said step of evacuating the sterilization chamber is conducted at a pressure of from 10 mb to 1 mb.

17. (new) The method of claim 15, wherein said step of evacuating the sterilization chamber is conducted at a pressure of approximately 1 mb.

18. (new) The method of claim 11, wherein said step of removing the condensation layer is performed after a predetermined reaction time.